

## DOH ARBOVIRUS WEEKLY UPDATE

August 3, 2003

West Nile virus is an emerging infectious disease, and only appeared in the eastern United States in 1999. In 2002, the virus spread to forty-four states in the United States; Oregon, Nevada, Utah and Arizona documented no West Nile virus activity. As of 31 July 2003, West Nile virus has been detected in 38 states. Verified human cases have occurred in 11 of those 38 states. As part of the West Nile virus surveillance system, the Department of Health (DOH) conducts human, avian, mammal and mosquito surveillance and keeps extensive database and spreadsheet records detailing the surveillance. DOH established a West Nile virus Call Center number at 202-535-2323, a health care and question line at 202-671-0733 and extensive web site information at <http://www.dchealth.dc.gov/>.

The chances of developing symptoms of West Nile virus from the bite of a mosquito are very remote. Much less than one percent of mosquitoes test positive for the virus in areas where the virus is present. And, if bitten by an infected mosquito, a person has less than a one percent chance that he or she will develop symptoms. Generally, the symptoms are very mild and may not even be noticed. Only in very rare cases will the symptoms be severe. Individuals over the age of 60 are the population most at risk. For 2002, the median age for human disease was fifty-five and the median age for mortality was 78. For 2003, the median age of WNV positive human cases is 55. Any person who suspects that they have the virus should contact their doctor immediately.

DOH has trained staff to assist residents with identifying and eliminating potential mosquito-breeding sites and to speak at neighborhood meetings and health fairs. The fundamental components of the West Nile virus plan are prevention and personal protection.

The West Nile virus program is a fluid program that is continually evaluated and altered to protect the public. Mosquito surveillance has been enhanced to assess the risk to public health and safety in the District. It is paramount to track positive mosquito pools and species. As a result of this increased mosquito surveillance, new species of mosquitoes have been identified as positive for West Nile virus in the District.

In 2002, six pools of *Aedes albopictus* tested positive in the District. This species is a daytime human biter and causes increased concern. Previously only *Culex spp.*, a dawn and dusk feeder, tested positive. As a result, DOH has added precautions of protecting residents against mosquito bites at all times during the day and not just dawn and dusk.

Nationally, per CDC, in 2002, there were 4156 cases of West Nile virus infection, including 284 deaths, in the United States. The outbreak was the largest since the virus first appeared in the Western Hemisphere 4 years ago. During the 2002 outbreak, CDC officials confirmed the first known cases in which West Nile was transmitted through organ transplants and blood transfusions. The possibility the virus could be spread through breast milk or sexual contact also has been studied. Although most people who

contract West Nile have no symptoms and those who do normally suffer little more than flu-like illness, it is believed they still can carry small amounts of the virus in their blood for several days.

### **Accuracy of Blood Supply Test Confirmed**

Date: Tue 29 Jul 2003

From: H.Larry Penning <hlpenning@yahoo.com>

Source: Florida Today, Associated Press report, Mon 28 Jul 2003 [edited]

### **Florida: Another Blood Donor Tests West Nile Virus-Positive**

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State health officials confirmed the first human case of West Nile virus contracted in Brevard County on Mon 28 Jul 2003. The confirmation came one week after the Central Florida Blood Bank [detected West Nile virus nucleic acid] in the donated blood of a 36-year-old Rockledge man.

Health officials plan to take another blood sample from the Rockledge man in a few weeks to make sure he has fully recovered from the viral infection. He was thought to have been infected by the virus, which is spread by mosquitoes, while outside on the 4th of July. The man recovered from a brief illness by the time he gave blood on 15 Jul 2003 at the blood bank's Rockledge branch. The health department is also testing another positive [test result] for West Nile virus that the blood bank reported late last week in a 40-year-old Stuart donor. The blood bank found the 2 men's infected samples among 15 000 donations it has tested since 30 Jun 2003, using a new machine that identifies [viral nucleic acid]. The Stuart man, who suffered no significant illness, was working outside in the Rockledge area between late May and early July; he gave blood on 6 Jul 2003.

There have been no medical alerts in Brevard in 2003 for mosquito-borne illnesses. But state health officials issued alerts for West Nile virus infection for 2 counties earlier in July after an 85-year-old female in Okaloosa County and a 75-year-old male in Collier County contracted the disease. Both are recovering.

In 2002, West Nile virus killed 284 of 4156 people infected in America. Two of 28 people infected in Florida died.

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### **Texas: accuracy of blood supply test confirmed**

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[Dr Rossmann has forwarded the following additional information concerning the West Nile virus positive blood donation given by a woman in Texas last month (see part [1] of West Nile virus update 2003 - USA (15) 20030711.1706). I am grateful for Dr Rossmann's prompt and informed response to my request for information. Since the original report of the positive blood donation was received, 3 suspected human cases of

West Nile virus infection have been reported from Montgomery county and northwest Houston, Texas. - Mod.CP]

The virus was sequenced (by Roche) to confirm that it is West Nile virus. Donor follow-up will continue as part of the clinical trial for this test. The donation was given the week of 22 Jun 2003. In our area there has been bird and mosquito activity for some time, preceding the human cases that have now also been reported (see part [6] of West Nile virus update 2003 - USA (15) 20030711.1706).

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#### **STATEMENT FROM USDA APHIS re: ADVERSE EFFECTS ON PREGNANT MARES**

Excerpted from ProMED mail (Id: 20030724.1806)  
Source: Aphis website [edited] <<http://www.aphis.usda.gov>>, accessed  
July 23, 2003

Some recent stories have suggested that the Fort Dodge Animal Health WNV Vaccine approved by the USDA may cause pregnant mares to abort or give birth to deformed foals. The misleading information in those articles has sparked many anxious phone calls from horse owners, veterinarians, and others involved with horses.

Horse owners should be assured that the vaccine is safe, and it should be used as protection against West Nile Virus. Millions of doses of the vaccine have been used since the USDA's Center for biologics approved its use in 2001.

The Center for Veterinary Biologics, within USDA's Animal and Plant Health Inspection (APHIS), maintains a toll-free telephone hotline (800-752-6255) and a mailbox on its website and actively encourages veterinarians and other vaccine customers to report problems with vaccines. <<http://www.aphis.usda.gov/vs/cvb>>

To date, there have been a very small number of reports regarding a possible association between the use of WNV vaccine and abortions, birth defects, or other reproductive anomalies or failures. It does not appear that there is a relationship between WNV vaccine use and these reproductive problems or any other major problems. The Center and the vaccine manufacturer will continue to collect, monitor, and track the performance of this vaccine.

**Excerpt from CDC Website, last modified July 28, 2003.**

## **Blood Transfusions and Organ Donations Updated**

### **Q. What is being done to reduce the risk of transfusion-related West Nile virus transmission in 2003?**

A. In 2003, all blood banks are using blood screening tests for West Nile virus. In addition, blood banks are not taking donations from people who have fever and headache in the week before they donate blood. The screening test are in place at all of the nation's blood banks. State and local public health departments report cases of West Nile virus infection in patients who have received blood transfusions in the 4 weeks before they got sick to the blood collection agency that collected the donation and to CDC from through ArboNET, the national database where information about cases of West Nile virus is kept. In addition, cases of West Nile virus infection in people who donated blood in the 2 weeks preceding illness onset should also be reported to CDC and blood collection agencies where the sick person donated blood. The blood collection agency will destroy potentially infectious units of blood.

The new screening methods allow blood banks to destroy potentially infectious blood before it is given to anyone. To reduce the number of donations from potentially infected people, blood banks will refuse to accept blood from people with recent fever and headaches.

In addition, public health departments and blood banks will cooperate to identify and destroy blood products (if necessary) from donors who develop a West Nile viral illness after they give blood. If someone becomes ill after a transfusion, blood banks will destroy the blood products taken from the donor of the transfused blood. Prompt reporting of these cases will help facilitate withdrawal of potentially infected blood components.

CDC, the Food and Drug Administration (FDA), and the Health Resources and Services Administration (HRSA), blood collection agencies and state and local health departments will continue to investigate West Nile virus infections in people who receive blood transfusions and transplanted organs to make sure these new screening methods are working.

For more information on current efforts by the FDA see:  
<http://www.fda.gov/cber/gdlns/wnvguid.htm>

### **Q. Should people avoid donating blood?**

A. No. There is no risk of West Nile virus infection for people who give blood. Blood saves lives and is always needed, especially during the summer months. Because donating blood is safe, we encourage blood donation now and in the future. We also

encourage all donors to truthfully answer the questions asked by the blood bank to make sure you are fit to donate on a given day.

**Q. Should people avoid getting blood transfusions or organ transplants?**

A. Roughly 4.5 million people receive blood or blood products annually. The benefits of receiving needed transfusions or transplants outweigh the potential risk for West Nile virus infection. However, doctors and their patients who need blood transfusions or organ transplants should be aware of the risk for West Nile virus infection.

**Q. How can blood banks avoid collecting blood from donors who may have West Nile virus?**

A. On May 5, 2003, FDA issued guidance for blood banks that describes methods to screen out potential blood donors who have symptoms that suggest West Nile viral illness (i.e., headache, fever) and to define blood product safety practices with regards to West Nile virus (<http://www.fda.gov/cber/gdlns/wnvguid.htm>).

Because most people who have West Nile virus infections do not have symptoms, it may be difficult to identify them. To avoid this problem, blood banks and their industry partners have developed tests to screen the blood for West Nile virus. As of July 14, 2003, every blood bank in the US is screening donated blood for WNV.

**Q. If a person had a West Nile virus infection in the past, can they still donate blood?**

A. Yes. West Nile virus infections do not last very long. The virus is in the blood for a very short time. People fight the virus and usually get rid of it in a few days. When they get rid of the virus, they develop an antibody (a protein that helps fight infections). Developing an antibody means that you are fighting the infection. The antibody will keep them from getting a West Nile virus infection again and will keep the virus out of their blood.

Potential blood donors with a medical diagnosis of West Nile viral illness that includes a compatible illness and laboratory results should not be allowed to donate for at least 28 days from the start of their symptoms OR until 14 days after they recover, whichever date is later. If there are no symptoms to suggest a West Nile virus illness, a positive West Nile virus antibody test result alone should not be grounds for refusing a blood donation.

**Q. If I recently had a transfusion or transplant, should I be concerned about getting West Nile virus?**

A. You should be aware of the potential risk for West Nile virus infection and the need to monitor your health. If you have symptoms of West Nile virus or other concerns you should contact your physician. A large number of West Nile virus infections due to mosquito bites occurred among people in the United States during 2002. Some of these people also received blood transfusions and/or organ transplantations. If a patient who

recently received a blood transfusion or organ transplantation develops an infection, that does not necessarily mean that the transfusion/transplantation was the source of infection.

## **Posted on Beyond Pesticides Daily News, July 14, 2003**

<http://www.beyondpesticides.org>.

### **Ohio City Adopts Landmark Law to Stop Pesticide Spraying for West Nile Virus**

The City of Lyndhurst, Ohio, a suburb of Cleveland, passed a landmark ordinance on July 7, 2003 prohibiting the spraying of pesticides "in an effort to help control the spread of the West Nile virus." The City's action follows a community forum in which a panel of experts on mosquito management and health effects of pesticides discussed the hazards and the lack of efficacy associated with the spraying of adulticides, or pesticides used to spray adult mosquitoes.

In adopting the groundbreaking ban, the City Council pointed to other mosquito management methods that are known and accepted to be more effective. The Council stated, "[T]here is substantial belief that the more effective way of controlling the mosquito population is by larvicide treatment and thorough education of the City's residents regarding methods and procedures to minimize exposure to the virus." In adopting the ordinance, the Council found that "the risk/benefit analysis conducted by experts clearly indicates that the dangers of WNV are minimal and affect a very small segment of the population and that the long-term health and environmental risks of spraying with synthetic pesticides poses a much greater risk." Other communities, such as Ft. Worth, Texas and Washington, DC, have adopted administrative programs that do not spray adulticides for West Nile Virus.

For more information on public policy and mosquito management, please see Beyond Pesticides' <[www.beyondpesticides.org/MOSQUITO/INDEX.HTM](http://www.beyondpesticides.org/MOSQUITO/INDEX.HTM)>mosquito and West Nile virus program page. For more information on the ordinance, contact Councilman Scott Picker is the contact person in Lyndhurst. He can be reached at 216-272-0357 or 216-381-1641, or e-mail [spicker117@yahoo.com](mailto:spicker117@yahoo.com).

## **2003 CDC National West Nile Virus Case Summary**

United States: West Nile Virus Activity; Thu 24 Jul to Wed 30 Jul 2003

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This report summarizes West Nile virus (WNV) surveillance data reported to CDC through ArboNET as of 3 a.m., Mountain Daylight Time, 30 Jul 2003.

During the reporting week of 24 to 30 Jul 2003, a total of 32 human cases of WNV infection were reported from 7 states (Alabama, Colorado, Florida, Louisiana, Mississippi, South Dakota, and Texas). During the same period, WNV infections were reported in 277 dead corvids (crows and related species), 70 other dead birds, 36 horses, one dog, one unidentified animal species, and 352 mosquito pools.

During 2003, a total of 44 human cases of WNV infection have been reported from Texas (n = 11), Louisiana (n = 10), Alabama (n = 6), Colorado (n = 4), Florida (n = 4), South Dakota (n = 4), Iowa (n = one), Minnesota (n = one), Mississippi (n = one), Ohio (n=one), and South Carolina (n = one). Among 43 (98 percent) cases for which demographic data were available, 27 (63 percent) occurred among men; the median age was 55 years (range: 5 to 87 years), and the dates of illness onset ranged from 29 May to 19 Jul 2003. In addition, 828 dead corvids and 220 other dead birds with WNV infection were reported from 36 states; 90 WNV infections in horses have been reported from 19 states (Alabama, Arkansas, Colorado, Florida, Georgia, Kansas, Kentucky, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Carolina, North Dakota, Oklahoma, South Dakota, Texas, Wisconsin, and Wyoming), one infection was reported in an unidentified species (Florida), and 2 WNV infections were reported in dogs (Florida and South Dakota).

During 2003, WNV seroconversions have been reported in 86 sentinel chicken flocks from 6 states (Colorado, Florida, Iowa, Louisiana, North Carolina, and Nebraska). South Dakota and Louisiana each reported 3 seropositive sentinel horses; 679 WNV-positive mosquito pools have been reported from 18 states (Colorado, Connecticut, Georgia, Illinois, Indiana, Kansas, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, Nebraska, New Jersey, South Dakota, Tennessee, Texas, Virginia, and Wisconsin).

### **CANADA Update**

Source: Health Canada, Thu 31 Jul 2003

<[http://www.hc-sc.gc.ca/pphb-dgspsp/wnv-vwn/mon\\_e.html](http://www.hc-sc.gc.ca/pphb-dgspsp/wnv-vwn/mon_e.html)>

Human: One confirmed case in Saskatchewan, detected in blood donation

Horses: 5 confirmed equine cases; Ontario (1), Manitoba (2), Saskatchewan (1), Alberta (1).

Mosquitoes: mosquito pool previously reported WNV-positive July 15 2003 (in Ontario) is now considered a false positive. As of 31 Jul, 4 mosquito pools WNV-positive; Quebec (1), Ontario (1), Manitoba (1), Alberta (1).

### **District-Wide Mosquito Data**

#### First Positive Pool Identified

We received a report July 30 of the first mosquito pool to test positive for West Nile virus. The pool of mosquitoes captured by gravid trap consisted of 25 female *Culex pipiens*. The pool was collected on July 16, tested on July 29 with a preliminary positive finding and confirmed positive on July 30 by the US Army at Fort Meade using the RT-PCR method.

The location of the trap is in the 3000 block of M St, NW. Teams have treated the area with larvicide and distributed literature at that location and the surrounding eight-block area.

### Second Positive Pool Identified

We received a report that mosquitoes collected by the US Army tested positive for West Nile virus. The pool of mosquitoes captured by gravid trap consisted of 15 female *Culex pipiens*. The pool was collected on July 23, tested positive on July 28 by the US Army at Fort Meade using the RT-PCR method. The location of the trap is in the 3000 block of North Capital St, NW. Teams have larvicided and distributed literature at that location and the surrounding eight-block area.

### Overall Mosquito Efforts

The US Army Center for Health Promotion and Preventive Medicine –North (USACHPPM-North) tests all mosquitoes collected within the District. Specimens are submitted from Department of Defense Installations, National Park Services and the Department of Health. As of the Pool and Testing Log Report dated 31 July 2003, 3578 female mosquitoes sorted in 393 pools have been tested. Three pools have been positive. The Department of Health has 345 female mosquitoes awaiting testing. Specimens have been submitted from DoD installations at Walter Reed Army Medical Center and Ft. McNair and the Armed Forces Retirement Home, National Park Services locations at Rock Creek Park, National Capital Parks-East, National Capital Parks-Central and the C & O Canal, East. Department of Health trap locations are located in each Ward of the District.

Eastern Equine Encephalitis: All mosquito pools to date have tested negative for EEE.

Malaria: 2 pools of Anopheles mosquitoes from Ft. McNair tested negative for Vivax malaria by both VecTest and PCR.

## **STATUS OF DISTRICT PROGRAMS:**

### **CALL CENTER**

- DOH established a West Nile Virus Call Center at 202-535-2323 effective April 11, 2003. Residents and visitors are encouraged to call the Call Center to report standing water, mosquito concerns, and dead birds and to request advice and assistance.
- The Call Center, year-to-date, has received over 259 calls regarding standing water, mosquito infestations, larviciding and dead birds.

### **HUMAN SURVEILLANCE**

- Currently, there are 21 cases of aseptic/bacterial/viral meningitis in the District. DOH is assisting hospitals with reporting these cases. There are no probable cases as this time.
- DOH has contacted all hospitals to review protocol for WNV-suspect cases.



- DOH staff conducts active human surveillance.
- DOH staff distributed West Nile virus Physician Alerts by blast fax to health care providers and hospitals detailing the West Nile virus case definition, reporting and specimen collection and submission criteria.
- DOH staff contacts hospital infectious disease practitioners weekly to determine if any patients meet the testing and reporting criteria, effective May 15.
- DOH staff prepares, processes, transports and submits human specimens for testing.
- In 2001, 20 human samples were submitted for testing. All samples tested negative.
- In 2002, 80 human samples were submitted for testing. Thirty-one samples were positive. Three samples were probable, twenty-eight samples were negative and eighteen samples were considered pending because information was not complete.

## **MOSQUITO SURVEILLANCE**

- Positive Pool Locations: 3000 blk M St, NW (2 pools); 3000 blk North Capital St, NW (1 pool).
- As of 31 July 2003, 3578 female mosquitoes placed into 393 pools have been collected within the District and tested for West Nile virus; two pools have been positive.
- Twenty-five gravid traps have been set for the week of July 28 thru August 3 in Wards 1, 2, 3, 4, 5 and 7.
- Specimens collected from the week of July 28 thru August 3 are as follows; Ward 1-7, Ward 2-0, Ward 3-45, Ward 4-44, Ward 5-12 and Ward 7-15 female mosquitoes. Mosquitoes are sent to US Army Center for Health Promotion and Preventive Medicine, Ft. Meade, MD to be sorted into pools. (A mosquito pool consists of 1-25 female mosquitoes of a specific genus and species from the same trap, location and trap night.)
- YTD, 1278 female mosquitoes have been collected by DOH and sent for testing.
- The Department of Health currently has 345 female mosquitoes awaiting testing.
- Trapping began the first week in June. Trap locations have been determined.
- DOH staff sets gravid traps, throughout the District in each ward per an established grid pattern. A collaborative effort between DOH, National Park Services (NPS) and the Department of Defense (DoD), ensures that trapping locations incorporate all areas of the District.
- DOH staff set mosquito traps and collect specimens from over 30 traps. Traps are set for 2 trap nights per week. Mosquitoes are sorted, prepared for testing and transported the Ft. Meade, MD for arboviral testing.
- The US Army will test all District mosquito specimens for West Nile and other relevant arboviruses and malaria, depending on species.
- In 2001, 870 pools were collected in the District and submitted for testing. Three pools tested positive.
- In 2002, 1315 pools were collected in the District submitted for testing. 84 pools tested positive, including 5 pools of *Aedes sp.* and 79 pools of *Culex spp.*

Locations of positive pools are as follows: 3100 blk Conn. Ave (1), Rock Creek Park (17), Ft. McNair (47), US Soldier and Airmen's Home (19).

- In 2002, there were 19 individual *Anopheles* mosquitoes (possible carrier of malaria) collected and placed into eight pools that were tested for malaria. All pools tested negative.

## AVIAN SURVEILLANCE

- 2003: Year to date there have been 138 dead bird reports with the following break-down by ward; Ward 1-8, Ward 2-9, Ward 3-26, Ward 4-21, Ward 5-22, Ward 6-19, Ward 7-19, Ward 8-14.
- | <u>Week</u>      | <u>Bird Reports</u> |
|------------------|---------------------|
| April 14-20      | 4                   |
| April 21-27      | 3                   |
| April 28-May 4   | 6                   |
| May 5-11         | 5                   |
| May 12-18        | 7                   |
| May 18-25        | 3                   |
| May 28-June 1    | 26                  |
| June 2-8         | 19                  |
| June 9-15        | 12                  |
| June 16-22       | 7                   |
| June 23-29       | 5                   |
| June 30-July 6   | 7                   |
| July 7-13        | 9                   |
| July 14-20       | 16                  |
| July 21-27       | 15                  |
| July 28-August 3 | 13                  |
- DOH no longer collects and tests dead birds because West Nile virus is considered endemic in the District. Further positive results of dead bird testing do not provide any relevant information. Information will be collected on sightings of dead birds for empirical information.
- The Smithsonian Institute and the US Army are testing select birds for West Nile and other arboviruses. Year-To-Date, two birds have tested positive. An American Robin collected 7/22 from 1400 blk D Chanute, SW and a Black-crowned heron collected 7/17 from 3100 blk Connecticut Ave, NW.
- Sightings of dead birds are received and compiled at the Call Center. Residents are asked to report the location and physical description of all dead birds. A database will be established and maintained to capture all information.
- Residents are encouraged to dispose of the birds. Specific detailed instructions for disposal are available on the DC Website ([dchealth.dc.gov](http://dchealth.dc.gov)) and at the Call Center (202-535-2323).
- In 2000, the first positive bird was collected on September 28, with a total of 5 positive birds for the year.

- In 2001, the first positive bird was collected on July 10. Nine hundred fourteen (914) birds were collected, four hundred forty-four (444) were tested and three hundred sixty (360) tested positive, with a percent of positivity of 81.08%.
- In 2002, the first positive bird was collected on May 1. Nine hundred five (905) birds were collected, three hundred forty (340) were processed for testing, thirty-one (31) tested negative, one hundred thirty-four (134) were disposed of and one hundred seventy-five (175) birds tested positive with a rate of positivity of 84.95%.
- The positive bird breakdown by ward for 2002 was Ward 1-10, Ward 2-8, Ward 3-123, Ward 4-12, Ward 5-2, Ward 6-7, Ward 7-16, and Ward 8-2.

## **MOSQUITO CONTROL**

- As surveillance data reflects locations of West Nile virus activity, staff will larvicide an eight-square block area surrounding these sites.
- Year-to-date 2003, DOH staff has larviced 2507 catch basins. The Ward breakdown is as follows; Ward 1-182 catch basin; Ward 2-55 catch basins; Ward 3-685 basins; Ward 4-498 basins; Ward 5-297 basins; Ward 6-257 basins; Ward 7-318; Ward 8-215 catch basins.
- Year-to-date 2003, DOH staff has applied larvicidal treatments in alleys with improper drainage, ponds, swamps and park sites in 40 locations, 9 of which are constant bodies of water.
- DOH staff larvicide in response to WNV positive human test results, WNV positive mosquito results, mosquito density and nuisance areas and community concerns. The larvicide, a biological product that kills mosquitoes in the larval stage, is placed in catch basins and in areas of standing or stagnant water.
- In April of 2002, DOH staff began larviciding in the District at locations of positive birds and mosquitoes from the previous year in an eight square block area at each location.
- The larvicide application is repeated approximately every 5-6 weeks.
- Larviciding has been determined to be more effective over a period of time than adulticiding. In 2002, mosquito catches were significantly reduced in areas where larviciding efforts were conducted.
- In 2001, DOH staff larviced three thousand four hundred ninety-six (3,496) catch basins.
- In 2002, DOH staff larviced ten thousand eight hundred thirty-five (10,835) catch basins.
- The District does not expect to spray for mosquitoes because of low efficacy; die-offs of non-target species and potential health risks to a high population of persons affected with respiratory problems and compromised immune systems.
- Killing mosquito larva and eliminating mosquito-breeding sites are the most effective practices to reduce the numbers of mosquitoes.
- The Center for Disease Control and Prevention (CDC) recommends that larvicide be used to reduce mosquito populations.

## **MAMMAL SURVEILLANCE**

- DOH staff conducts passive mammal surveillance.
- DOH staff distributed information to vets, pet shops, and horse stable managers detailing reporting and specimen collection and submission criteria and protocol.
- No mammals have tested positive in the District for the last four years.
- Letters to all veterinarians in the District have been sent to assist veterinarians in recognizing, submitted samples for testing and reporting West Nile virus cases.

## **OUTREACH AND EDUCATION**

- In 2003, year to date, approximately 35,543 brochures have been distributed to elderly homes, day care providers, neighborhood services, door-to-door and to all DC Libraries. Literature has also been available at various events.
- DOH Representatives have participated in 8 media interviews with CNN, Channel 7/8, Washington Post, WHUR Radio, Channel 9, Metro Weekly News, Washington Times and Channel 5.
- DOH has educated participants of the DC Government Safety Fair by setting up a booth, passing out literature and speaking with concerned citizens.
- DOH has prepared an informational brochure emphasizing prevention and protection. The brochure has contact information for the Call Center and website. It has been translated into Spanish, Chinese, Korean and Vietnamese.
- DOH has developed space on the DOH website to provide residents with information, including, the District Arbovirus Surveillance and Response Plan for 2003, methods of controlling mosquitoes, CDC questions and answers, recent press releases and weekly updated surveillance reports.
- DOH has developed an informational script and power point presentation for community presentations.
- In 2002, DOH staff distributed brochures door to door to 46,987 residences, and spoke to residents about prevention and protection techniques. DOH distributed approximately 201,250 brochures in bulk.
- Brochures have been distributed by request to private citizens, day care centers, senior citizen homes, residential housing, hospitals, libraries, schools, parks and recreation centers, churches, other District agencies, NSC Coordinators and all ANC Commissioners.